Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

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28. (Previously Presented) A method of producing an oxygen-scavenging composition, the method comprising the steps of providing a polymer, the polymer having a repeat unit including a carbonyl group, and adding a metal to the polymer in an amount of at least 200 ppm in the polymer to form an oxygen-scavenging composition, further comprising the step of solid-stating the polymer by heat treating the polymer, at a temperature above a glass transition temperature of the polymer and below a melting temperature of the polymer, under a low oxygen content atmosphere to enhance an oxygen-scavenging capability of the oxygen-scavenging composition.

29. (Previously Presented) The method of claim 28, wherein the low oxygen content atmosphere has an oxygen content of no greater than 10%.

30. (Previously Presented) The method of claim 28, wherein the low oxygen content atmosphere comprises an inert gas atmosphere.

31. (Previously Presented) The method of claim 30, wherein the inert gas atmosphere comprises nitrogen or argon.

32. (Previously Presented) The method of claim 28, wherein the low oxygen content atmosphere comprises a reduced pressure atmosphere.

33. (Previously Presented) The method of claim 32, wherein the reduced pressure atmosphere comprises a pressure of no greater than 133 N/ m^2 (1 torr).

34. (Previously Presented) The method of claim 28, wherein the solid-stating step is carried out for a period of at least 8 hours.

35. (Previously Presented) The method of claim 28, further comprising the step, before the solid stating step, of drying the polymer using at least one of air drying and vacuum drying, the drying being carried out at a temperature less than the glass transition temperature of the polymer.

36. (Previously Presented) The method of claim 28, wherein the polymer comprises an aromatic polyamide; an aliphatic polyamide; nylon; MXD-6 nylon; a xylidene-substituted polyamide; a polymer having a repeat unit having at least one hydrogen atom alpha to the carbonyl; a polyester; or a polyketone.

37. (Previously Presented) The method of claim 28, wherein the metal is added to the solid-stated polymer and the heat treatment increases the oxygen scavenging

performance of the composition by a factor of at least 1.3 as compared to a composition of the metal and the same polymer prepared without a solid-stating step.

38. (Previously Presented) The method of claim 28, wherein the metal is added to the solid-stated polymer and the heat treatment increases the oxygen scavenging performance of the composition by a factor of at least 2 as compared to a composition of the metal and the same polymer prepared without a solid-stating step.

39. (Previously Presented) The method of claim 28, wherein the metal is added to the solid-stated polymer and the heat treatment increases the oxygen scavenging performance of the composition by a factor of at least 4 as compared to a composition of the metal and the same polymer prepared without a solid-stating step.

40. (Previously Presented) The method of claim 28, wherein the metal is a transition metal.

41. (Previously Presented) The method of claim 40, wherein the transition metal is selected from a cobalt compound, cobalt carboxylate, and cobalt neodecanoate.

42. (Previously Presented) The method of claim 28, wherein, in ambient air, a plaque formed of the oxygen-scavenging composition has a higher oxygen scavenging rate under wet conditions than under dry conditions.

43. (Previously Presented) The method of claim 28, wherein a ratio of the oxygen-scavenging rate of a plaque of the oxygen-scavenging composition comprising a xylidene-substituted polyamide, containing 500 ppm cobalt as the metal, in an ambient atmosphere containing 21% oxygen at 23° C under wet conditions and under dry conditions is greater than 2:1.

44. (Previously Presented) The method of claim 28, wherein the composition comprises a xylidene-substituted polyamide containing cobalt as the metal.

45. (Previously Presented) A package comprising a wall having therein an oxygen-scavenging composition produced by the method of claim 28, wherein the package, when filled with an aqueous liquid having an oxygen concentration of 9000 ppb or less and sealed, removes dissolved oxygen from the liquid.

46. (Previously Presented) The package of claim 45, wherein the package, when filled with an aqueous liquid having an oxygen concentration of 200 ppb or less and sealed, removes dissolved oxygen from the liquid.

47. (Previously Presented) The package of claim 45, wherein after filling and sealing the package maintains the oxygen content of the liquid below its as-filled oxygen content for at least 3 months.

48. (Previously Presented) The package of claim 46, wherein the package maintains the oxygen content of the liquid below its initial oxygen content for at least 3 months.

49. (Previously Presented) The package of claim 45, wherein the package reduces the oxygen content of the liquid to less than 50 ppb.

50. (Previously Presented) The package of claims 45, wherein the oxygen content of the liquid is reduced at a rate of at least 50 ppb/day.

51. (Previously Presented) The package of claim 45, wherein the package can be stored unfilled in an ambient atmosphere containing 21% oxygen for at least 3 months prior to said filling with an aqueous liquid.

52. (Previously Presented) The package of claim 45, wherein the package filled with the aqueous liquid has an oxygen removal rate greater than an oxygen removal rate of an unfilled package.

53. (Previously Presented) The package of claim 45, wherein the wall includes at least one layer of the oxygen-scavenging composition and at least one oxygen permeable layer.

54. (Previously Presented) The package of claim 53, wherein the oxygen permeable layer is also permeable to water.

55. (Previously Presented) The package of claim 54, wherein the wall is configured to allow water to permeate the permeable layer to facilitate oxygen removal by the oxygen-scavenging layer.

56. (Previously Presented) The package of claim 45, wherein the wall includes at least two inner layers of the oxygen-scavenging composition between outer layers of one or more other polymers.

57. (Previously Presented) The package of claim 45, wherein the wall includes at least one layer of the oxygen-scavenging composition between polyester layers.

58. (Previously Presented) The package of claim 57, wherein the polyester comprises polyethylene terephthalate.

59. (Previously Presented) The package of claim 45, wherein the package includes at least one layer comprising a blend of the oxygen-scavenging composition and a second polymer.

60. (Previously Presented) The package of claim 59, wherein the second polymer is selected from the group consisting of polyester and polyolefin.

61. (Previously Presented) The package of claim 60, wherein the second polymer comprises polyethylene terephthalate.

62. (Previously Presented) The package of claim 45, wherein the wall of the package is substantially transparent.

63. (Previously Presented) The package of claim 45, wherein the package is a substantially transparent multilayer bottle.

64. (Previously Presented) The package of claim 45, wherein the package is a bottle and includes at least one inner layer of the oxygen-scavenging composition between outer layers of one or more other polymers.

65. (Previously Presented) The package of claim 64, wherein the package is filled with a food product.

66. (Previously Presented) The package of claim 65, wherein the package is filled with a food product selected from the group consisting of beer, juice and a tomato-based food product.

67. (Previously Presented) The package of claim 65, wherein the package is filled with beer having an oxygen concentration of 200 ppb or less and the oxygen concentration of the beer remains below its as-filled oxygen content for at least 16 weeks.

68. (Previously Presented) The package of claim 65, wherein the package is filled with juice having an oxygen concentration of 9000 ppb or less and the oxygen concentration of the juice remains below its as-filled oxygen content for at least 16 weeks.

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